

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number  
**WO 2005/059751 A1**

(51) International Patent Classification<sup>7</sup>: **G06F 11/00**

(74) Agent: **LEE, Young-Pil**; The Cheonghwa Building,  
1571-18, Seocho-dong, Seocho-gu, Seoul 137-874 (KR).

(21) International Application Number:  
PCT/KR2004/003249

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,  
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,  
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:  
10 December 2004 (10.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10-2003-0091882  
16 December 2003 (16.12.2003) KR

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): **SAM-  
SUNG ELECTRONICS CO., LTD.** [KR/KR]; 416, Mae-  
tan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742  
(KR).

(72) Inventor; and

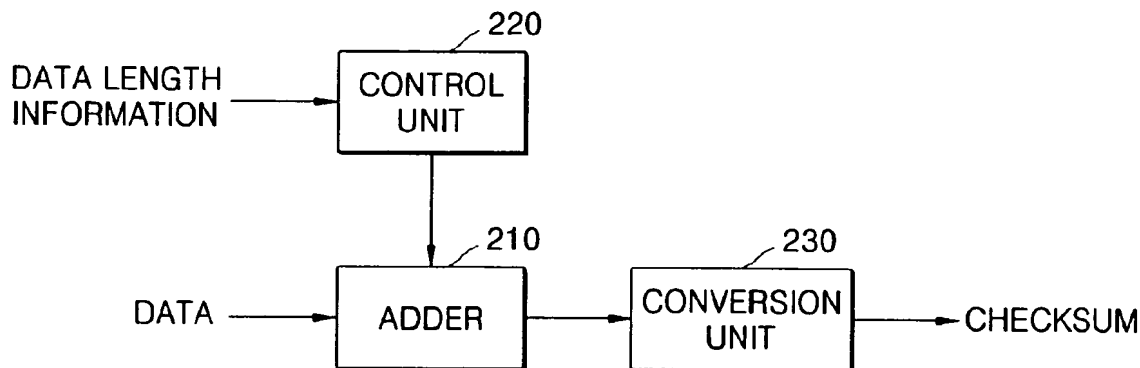
(75) Inventor/Applicant (for US only): **CHOI, Hyun-Seok**  
[KR/KR]; 406 (6-10) Nonhyun 1-dong, Gangnam-gu,  
Seoul 135-812 (KR).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: CHECKSUM GENERATION APPARATUS AND METHOD THEREOF



(57) Abstract: A checksum generation apparatus and method thereof are provided. The checksum generation apparatus includes a control unit which, in response to information on a predetermined length, outputs a control signal when an amount of data corresponding to the predetermined length is received; an addition unit which receives data, performs an addition on the received data, and, in response to the control signal, outputs an addition result; and a conversion unit which converts the addition result to a checksum. According to the checksum generation apparatus, it is possible to increase checksum calculation speed.

BEST AVAILABLE COPY

WO 2005/059751 A1